Amend

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-109. (Canceled)

110. (New) An isolated nucleic acid encoding a polypeptide comprising a heavy chain of an anti-CCR5 antibody or a portion thereof containing three CDR regions, wherein the three CDR regions comprise consecutive amino acids the sequences of which are identical to the sequences of CDR regions present in a heavy chain of a monoclonal antibody selected from the group: PA14 produced by the hybridoma designated PA14 (ATCC Accession No. HB-12610), PA8 produced by the hybridoma designated PA8 (ATCC Accession No. HB-12605), PA9 produced by the hybridoma designated PA9 (ATCC Accession No. HB-12606), PA10 produced by the hybridoma designated PA10 (ATCC Accession No. HB-12607), PA11 produced by the hybridoma designated PA11 (ATCC Accession No. HB-12608), and PA12 produced by the hybridoma designated PA12 (ATCC Accession No. HB-12609); and wherein the polypeptide in combination with a second polypeptide binds to an epitope of CCR5 comprising amino acid residues in (1) an N-terminus of CCR5, (2) one of three extracellular loop regions of CCR5, or (3) a combination of (1) and (2).

111. (New) The nucleic acid of claim 110, wherein the sequences of the three CDR regions are identical to the

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sequences of CDR regions present in monoclonal antibody PA14; and wherein the epitope of CCR5 comprises amino acid residues in (1) an N-terminus of CCR5, and (2) a second extracellular loop region of CCR5.

112. (New) An isolated nucleic acid encoding a polypeptide comprising a light chain of an anti-CCR5 antibody or a portion thereof containing three CDR regions, wherein the three CDR regions comprise consecutive amino acids the sequences of which are identical to the sequences of CDR regions present in a light chain of a monoclonal antibody selected from the group: PA14 produced by the hybridoma designated PA14 (ATCC Accession No. HB-12610), PA8 produced by the hybridoma designated PA8 (ATCC Accession No. HB-12605), PA9 produced by the hybridoma designated PA9 (ATCC Accession No. HB-12606), PA10 produced by the hybridoma designated PA10 (ATCC Accession No. HB-12607), PA11 produced by the hybridoma designated PA11 (ATCC Accession No. HB-12608), and PA12 produced by the hybridoma designated PA12 (ATCC Accession No. HB-12609); and wherein the polypeptide in combination with a second polypeptide binds to an epitope of CCR5 comprising amino acid residues in (1) an N-terminus of CCR5, (2) one of three extracellular loop regions of CCR5, or (3) a combination of (1) and (2).

113. (New) The nucleic acid of claim 112, wherein the sequences of the three CDR regions are identical to the sequences of CDR regions present in monoclonal antibody PA14; and wherein the epitope of CCR5 comprises amino acid residues in (1) an N-terminus of CCR5, and (2) a second extracellular loop region of CCR5.

114. (New) The nucleic acid of any of claims 110-113, wherein the nucleic acid is RNA, DNA or cDNA.

115. (New) The nucleic acid of claim 114, wherein the nucleic acid is cDNA.

116. (New) The nucleic acid of claim 110 or 111, wherein the polypeptide comprises a heavy chain portion of a Fab fragment of an antibody.

117. (New) The nucleic acid of claim 110 or 111, wherein the polypeptide comprises a heavy chain portion of a variable domain of an antibody.

118. (New) The nucleic acid of claim 110 or 111, wherein the polypeptide comprises a heavy chain portion of a $F(ab')_2$ fragment of an antibody.

119. (New) The nucleic acid of claim 110 or 111, wherein the polypeptide is a heavy chain of an antibody.

120. (New) The nucleic acid of claim 112 or 113, wherein the polypeptide comprises a light chain portion of a Fab fragment of an antibody.

121. (New) The nucleic acid of claim 112 or 113, wherein the polypeptide comprises a light chain portion of a variable domain of an antibody.

122. (New) The nucleic acid of claim 112 or 113, wherein the polypeptide comprises a light chain portion of a $F(ab')_2$ fragment of an antibody.

123. (New) The nucleic acid of claim 112 or 113, wherein the polypeptide is a light chain of an antibody.

124. (New) The nucleic acid of claim 110 or 112, wherein each encoded polypeptide is comprised within a polypeptide which is a single chain antibody.

125. (New) The nucleic acid of claim 110, wherein the nucleic acid is present in a hybridoma selected from the group of hybridomas consisting of PA14 (ATCC Accession No. HB-12610), PA8 (ATCC Accession No. HB-12605), PA9 (ATCC Accession No. HB-12606), PA10 (ATCC Accession No. HB-12607), PA11 (ATCC Accession No. HB-12608), and PA12 (ATCC Accession No. HB-12609).

126. (New) The nucleic acid of claim 125, wherein the hybridoma is PA14 (ATCC Accession No. HB-12610).

127. (New) The nucleic acid of claim 125 or 126, wherein the polypeptide comprises a heavy chain portion of a Fab fragment of an antibody.

128. (New) The nucleic acid of claim 125 or 126, wherein the polypeptide comprises a heavy chain portion of a variable domain of an antibody.

129. (New) The nucleic acid of claim 125 or 126, wherein the polypeptide comprises a heavy chain portion of a $F(ab')_2$ fragment of an antibody.

130. (New) The nucleic acid of claim 125 or 126, wherein the polypeptide is a heavy chain of an antibody.

131. (New) The nucleic acid of claim 112, wherein the nucleic acid is present in a hybridoma selected from the group of hybridomas consisting of PA14 (ATCC Accession No. HB-12610), PA8 (ATCC Accession No. HB-12605), PA9 (ATCC Accession No. HB-12606), PA10 (ATCC Accession No. HB-12607), PA11 (ATCC Accession No. HB-12608), and PA12 (ATCC Accession No. HB-12609).

132. (New) The nucleic acid of claim 131, wherein the hybridoma is PA14 (ATCC Accession No. HB-12610).

133. (New) The nucleic acid of claim 131 or 132, wherein the polypeptide comprises a light chain portion of a Fab fragment of an antibody.

134. (New) The nucleic acid of claim 131 or 132, wherein the polypeptide comprises a light chain portion of a variable domain of an antibody.

135. (New) The nucleic acid of claim 131 or 132, wherein the polypeptide comprises a light chain portion of a $F(ab')_2$ fragment of an antibody.

136. (New) The nucleic acid of claim 131 or 132, wherein the polypeptide is a light chain of an antibody.

137. (New) The nucleic acid of claim 125 or 131, wherein each encoded polypeptide is comprised within a polypeptide which is a single chain antibody.